REMARKS

Claims 1-8 and 34-56 are now pending in this Application. Claims 1, 40, 54, 55, and 56 are independent claims and the remaining claims are dependent claims. Claims 13-33 have been previously cancelled without prejudice. Claim 56 has been added by this amendment.

Claims 5-8, 35-39, 44-47, and 49-53 were objected to as being dependent upon a rejected base claim but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 56 has been added and includes the subject matter of claims 1, 2, and 5. No new matter is added by this amendment.

Claims 1-4, 34, 40-43, 48, 54, and 55 were rejected under 35 U.S.C. §102(e) as being anticipated by Elwalid, et al., U.S. Patent No. 6,353,616 B1 (hereinafter Elwalid). The Applicants respectfully disagree with this contention and assert that the present claimed invention is not anticipated by any disclosure in Elwalid. The Applicants believe that the claims as presented are in condition for allowance. A notice to this affect is respectfully requested.

The Elwalid Reference

Elwalid relates to allocation of processing capacity of a router in a packet network to processing Reservation Setup Protocol (RSVP) control messages.[1] During RSVP communications, senders and receivers transmit control messages (e.g., signaling message requests), such as PATH messages, RESV messages, UPDATE messages, and TEAR-DOWN messages.[2] Elwalid describes a packet network employing an RSVP system having routers that schedule the processing of RSVP control message based in part on link utilization.[3] The routers monitor link utilization, for example, as traffic experienced by the router, such as the average number of PATH, RESV, UPDATE, and TEAR-DOWN messages received by the router.

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[1]   Elwalid, col. 1, l. 10-12.
[2]   Elwalid, col. 6, l. 27-28.
[3]   Elwalid, Abstract.

<u>Elwalid</u> also describes the routers as having a processing section that employs adaptive weight assignment with respect to the control messages to allocate processing capacity, of the processing section, for the control messages.[4] <u>Elwalid</u> assigns PATH & RESV messages to a first message class, UPDATE messages to a second message class, and TEAR-DOWN messages to a third message class.[5] The router allocates weights to each message class, based in part upon link utilization for each message class.[6] The weight of the message class then corresponds to a portion of the router processing section's processing capacity.[7]

Generally then, <u>Elwalid</u> relates to <u>allocation of processing capacity of a router</u> **<u>for</u> RSVP control messages** (as opposed to application data messages) according to weights assigned to the various control message classes, where the assigned weights for each control message class are based upon the link utilization for each control message class.

<u>Applicants' Claim and Specification</u>

By contrast, claim 1 of the present Application describes a method for dynamically adjusting reserved bandwidth in a data communications device while transporting a session of data communication within the device. The data communications device receives a <u>first RSVP bandwidth reservation request</u> **associated with application data of a session of data communication**, the first RSVP bandwidth reservation request distinct from the application data. For example, the "first RSVP bandwidth reservation request" may be, for example, an RSVP RESV message that indicates to reserve 5 MBps of bandwidth through the data communications device. The data communications device establishes a first bandwidth reservation **associated with the application data** of the session of data communication in the data communications device <u>based upon the first RSVP bandwidth reservation request</u> and transports, through the data communication device, application data associated with the session of data

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[4]   <u>Elwalid</u>, Abstract.
[5]   <u>Elwalid</u>, col. 6, 1. 64-66.
[6]   <u>Elwalid</u>, Abstract.
[7]   <u>Elwalid</u>, Abstract.

communication utilizing data storage locations associated with the first bandwidth reservation.

The data communications device receives **bandwidth allocation adjustment information**, within <u>a second RSVP bandwidth reservation request</u>, **associated with application data of the session of data communication** and during the session of data communication, the second RSVP bandwidth reservation request distinct from the application data. For example, the "second RSVP bandwidth reservation request" may be, for example, an RSVP RESV message that indicates to reserve 10 MBps of bandwidth through the data communications device. As further claimed, the data communications device dynamically adjusts the first bandwidth reservation to produce a second bandwidth reservation for the application data of the session of data communication based upon the bandwidth allocation adjustment information within the second RSVP bandwidth reservation request while continually maintaining the session of data communication.

Accordingly, the present invention, as claimed, uses the **RSVP bandwidth reservation request** to establish a bandwidth reservation **associated with the application data** of the session of data communication. <u>As clearly stated in the claim, the RSVP bandwidth reservation request is distinct from the application data.</u>

Rejection under 35 U.S.C. §102(e)

Claims 1-4, 34, 40-43, 48, 54, and 55 were rejected under 35 U.S.C. §102(e) as being anticipated by <u>Elwalid</u>. However, to anticipate a claim, the cited reference must teach every element of the claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference."[8] "The identical invention must be shown in as complete detail as is contained in the ... claim."[9]

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[8]   *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).
[9]   *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

The Office Action, however, has not established that Elwalid anticipates independent claims 1, 40, 54, and 55 of the present Application because Elwalid does not teach, disclose or suggest every element of the Applicants' claims. Furthermore, the Office Action fails to cite Elwalid, or any reference, that discloses or suggests particular elements of the Applicants' independent claims.

One element of Applicants' claims 1, 40, 54, and 55 describes a data communications device as:

> "receiving a first RSVP bandwidth reservation request associated with application data of a session of data communication, the first RSVP bandwidth reservation request distinct from the application data."

Another element of Applicants' claims 1, 40, 54, and 55 describes the data communications device as:

> "receiving bandwidth allocation adjustment information, within a second RSVP bandwidth reservation request, associated with application data of the session of data communication and during the session of data communication, the second RSVP bandwidth reservation request distinct from the application data."

Independent claims 1, 40, 54, and 55, therefore, distinguish the application data as **separate and distinct** from the **RSVP bandwidth reservation request**.

With respect to the rejection of independent claims 1 and 55, the Office Action indicates that Elwalid anticipates claims 1 and 55. The Office Action, however, fails to address the above listed limitations, as recited in claims 1 and 55 and, furthermore, fails to point out with particularity where the above listed limitations, as recited in claims 1 and 55, are taught or disclosed in Elwalid, are taught or disclosed in Elwalid. The Applicants respectfully request that Examiner point out with particularity where each limitation as recited in claims 1 and 55 are taught in Elwalid.

With respect to the rejection of independent claims 40 and 54, the Office Action states that Elwalid discloses a data communications device capable of dynamically adjusting reserved bandwidth while maintaining a session of data communication, the device comprising:

an input for receiving application data including bandwidth
reservation requests;

a data storage mechanism including data storage locations;

a bandwidth reservation processor coupled to the input port and
accepting a first bandwidth reservation request indicating a first amount of
bandwidth to reserve for the session of data communication in the data
communications device, the bandwidth reservation processor establishing
a first bandwidth reservation associated with a session of data
communication in the data storage locations; and

a data scheduler coupled to the input port and coupled to the data
storage mechanism, the data scheduler receiving application data
associated with the session of data communication and depositing the
application data associated with the session of data communication into
the data storage locations associated with the first bandwidth reservation.

However, neither claim 40 nor claim 54 include any of these elements. Claim 40
relates to a data communications device performing the method listed in claim 1. Claim
54 relates to a content subscriber that includes means for performing the method listed in
claim 1. The Office Action, again, fails to address the limitations of "receiving a first
RSVP bandwidth reservation request associated with application data of a session of data
communication, the first RSVP bandwidth reservation request distinct from the
application data" and "receiving bandwidth allocation adjustment information, within a
second RSVP bandwidth reservation request, associated with application data of the
session of data communication and during the session of data communication, the second
RSVP bandwidth reservation request distinct from the application data" with respect to
claims 40 and 54. The Applicants respectfully request that Examiner point out with
particularity where each limitation as recited in claims 1 and 54 are taught in Elwalid.

Furthermore, Elwalid describes the use of the RSVP control messages to allocate
bandwidth in the router for processing of those RSVP control messages based on the
number or count of RSVP messages received. This is significantly different than the
present claimed invention.

In particular, Elwalid does not teach the claimed limitations of receiving
bandwidth allocation adjustment information (e.g., set application data stream XYZ to
10 MBps), within **a second RSVP bandwidth reservation** request (e.g., a PATH or
RESV RSVP message), and then using the **bandwidth allocation adjustment**

information within the second bandwidth reservation request to dynamically adjust the first bandwidth reservation to produce a second bandwidth reservation for the application data of the session of data communication while continually maintaining the session of data communication. As specifically stated in the claims, the data communications device of the present invention receives bandwidth allocation adjustment information, within a second RSVP bandwidth reservation request, associated with application data of the session of data communication and during the session of data communication **where the second RSVP bandwidth reservation request distinct from the application data**. The data communications device dynamically adjusts the first bandwidth reservation to produce a second bandwidth reservation for the application data of the session of data communication based upon the bandwidth allocation adjustment information within the second RSVP bandwidth reservation request while continually maintaining the session of data communication.

Since Elwalid is related to adjusting bandwidth available for processing RSVP protocol messages themselves and does so using counts of the number of RSVP messages received, there is no discussion in Elwalid of how to adjust bandwidth for **an application** data session that uses RSVP as a mechanism to reserve bandwidth while continually maintaining the application data session. From the claimed subject matter, it is clear that the RSVP bandwidth reservation requests are different than the application data of the session of data communication. Since claims 1, 40, 54, and 55 contain limitations directed to this subject matter, the claims patentably distinguish over Elwalid.

If the Examiner contends that the application data in Elwalid is the RSVP message itself, and the application data session is an RSVP session, there is still no teaching in Elwalid that information contained within a particular RSVP message is used to adjust bandwidth of the application data session (i.e., the RSVP session itself, as contended by the Examiner), all while continually maintaining the session of data communication. Again, Elwalid is related to adjusting bandwidth available for processing RSVP protocol messages themselves using counts of the number of particular RSVP messages received. It is unclear to the Applicants and it is certainly not taught, disclosed, or suggested in Elwalid, how Elwalid would use information contained within

the RSVP message to adjust bandwidth reservations of the RSVP protocol data session itself, as indicated in the claim limitations discussed above. Accordingly, a contention that the application data session is the RSVP message itself still does not cause a reading of the disclosure in Elwalid to anticipate each of the limitations of present claimed invention. If the Examiner contends otherwise, Applicants respectfully request that Examiner point out with particularity where each limitation as recited in claims 1, 40, 54, and 55 is taught in Elwalid.

Because Elwalid does not teach all of the claimed elements of the Applicants' independent claims 1, 40, 54, and 55, claim claims 1, 40, 54, and 55 should be allowed to issue. Furthermore, claims 2-8 and 34-39, which depend upon independent claim 1, claims 41-53, which depend upon independent claim 40 should also be allowed to issue as depending upon an allowable independent claims (i.e., for at least the reasons presented). Reconsideration of the rejection is respectfully requested.

Conclusion

In view of the foregoing remarks, this Application should be in condition for allowance. A Notice to this affect is respectfully requested. If the Examiner believes, after this Amendment, that the Application is not in condition for allowance, the Examiner is respectfully requested to call the Applicants' Representative at the number below.

If the U.S. Patent and Trademark Office deems a fee necessary to maintain the pendency of he case, this fee may be charged to the account of the undersigned, Deposit Account No. 50-0901.

If the enclosed papers or fees are considered incomplete, the Patent Office is respectfully requested to contact the undersigned collect at (508) 366-9600, in Westborough, Massachusetts.

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Respectfully submitted,   MAR 0 8 2004

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